

TIMOTHY COURCHANE
United States Attorney
District of Arizona
AMY C. CHANG
Arizona State Bar No. 027566
RAYMOND K. WOO
Arizona State Bar No. 023050
M. BRIDGET MINDER
Arizona State Bar No. 023356
Assistant United States Attorneys
Two Renaissance Square
40 N. Central Ave., Suite 1800
Phoenix, Arizona 85004
Telephone: 602-514-7500
Email: amy.chang@usdoj.gov
Email: raymond.woo@usdoj.gov
Email: bridget.minder@usdoj.gov

SUE BAI
Acting Assistant Attorney General
U.S. Department of Justice
National Security Division
LESLIE C. ESBROOK
New York State Bar No. 5406301
District of Columbia Bar No. 1670737
CHRISTOPHER M. COOK
District of Columbia Bar No. 90013354
Trial Attorneys
Counterintelligence and Export Control Section
950 Pennsylvania Ave, NW
Washington, DC 20530
Email: Leslie.Esbrook@usdoj.gov
Email: Christopher.Cook7@usdoj.gov
Attorneys for Plaintiff

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA

United States of America,
Plaintiff,

vs.

Abraham Chol Keech, and
Peter Biar Ajak,
Defendants.

CR-24-00394-PHX-SPL

**GOVERNMENT'S NOTICE
OF INTENT TO INTRODUCE
POSSIBLE EXPERT TESTIMONY:**

DAVID R. LETENDRE

1 Pursuant to Rule 16(a)(1)(G) of the Federal Rules of Criminal Procedure, the United
2 States hereby gives notice of its intent to present testimony that may fall under Rules 702,
3 703, or 705 of the Federal Rules of Evidence during its case-in-chief and/or in rebuttal at
4 trial. The government does not concede this witness is an expert but discloses his testimony
5 in an abundance of caution. The government reserves the right to supplement this notice.

6 **David R. Letendre, Stinger Production Lead,**
7 **U.S. Army Aviation and Missile Research, Development and Engineering Center**

8 Mr. Letendre is currently the Stinger Production Lead at the U.S. Army's Aviation
9 and Missile Research, Development and Engineering Center ("AMRDEC").

10 Mr. Letendre has nearly 12 years of experience working on the U.S. Army's Stinger
11 Missile program and the production of Stinger missiles. Among other duties, Mr. Letendre
12 is responsible for setting up the production line for the Stinger Service Life Extension
13 Program ("SLEP"), including Work Instructions, fixtures, tool design, and process
14 development, to extend the life of the U.S. Army's entire Stinger inventory. Mr. Letendre
15 also developed a Stinger Repair Program that placed approximately \$1 billion worth of
16 Stinger missiles back into usable inventory. Mr. Letendre has worked with Raytheon
17 Missile Systems to ensure newly produced Stinger missiles are in accordance with
18 technical requirements. Further details of Mr. Letendre's qualifications are contained in his
19 CV, which is being provided to defense counsel via email.

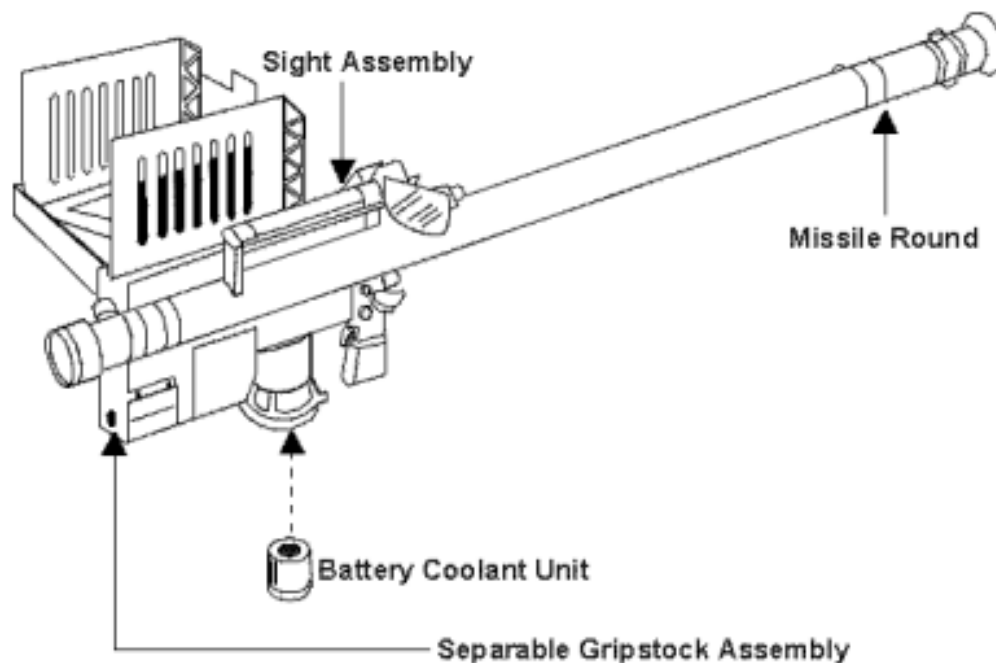
20 The government intends to elicit the following opinions from Mr. Letendre based
21 on his education, training, and experience as described in his CV:

22 **1. Stinger use and function.** The government anticipates Mr. Letendre will
23 testify that the FIM-92 Stinger Missile system ("Stinger") is a man-portable, shoulder-
24 fired, supersonic missile system designed to counter high-speed, low-level, ground-attack
25 aircraft. The Stinger is effective against helicopters, unmanned aerial vehicles, and
26 observation and transport aircraft. Once fired, the Stinger uses proportional navigation
27 algorithms to guide the missile to a predicted intercept point. The Stinger can be used as a
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man portable air defense system (“MANPADS”) when the weapon is fired from the gunner’s shoulder or it can be mounted aboard a vehicle with the appropriate launcher.

Mr. Letendre will further testify that the Stinger’s reprogrammable microprocessor is a dual-channel, passive infrared (“IR”) and ultraviolet (“UV”)¹ tracking seeker and proportional navigational guidance missile system. The spectral discrimination of the seeker detector material, when supercooled by the argon gas in the battery coolant unit, enables the Stinger to acquire, track, and engage targets in any aspect (incoming, outgoing, or crossing). This functionality means that the Stinger requires no inputs from the gunner once the weapon is fired, allowing the gunner to take cover, move to an alternate position, or engage additional targets. The Stinger also possesses an integral identification, friend or foe subsystem (“IFF”) to assist the gunner in identifying friendly aircraft.

2. Stinger system components. Mr. Letendre will testify that the Stinger weapon round consists of a missile round (in a launch tube), a separable gripstock assembly, and up to three battery coolant units (“BCUs”).

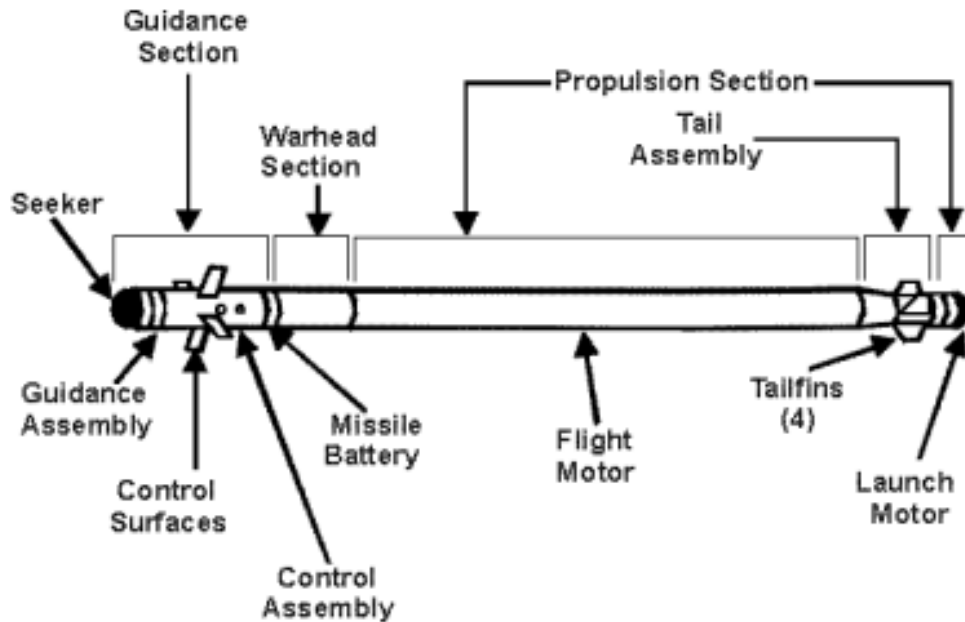


¹ Early Stinger models used only IR; later models used both IR and UV.

1 Mr. Letendre will testify about the three components of the Stinger weapon round:

- 2 • **Missile Round.** The missile round consists of a Stinger missile sealed in a
3 launch tube with an attached sight assembly. The sight assembly allows the
4 gunner to locate and track an aircraft. Two acquisition indicators are mounted
5 on the sight assembly. The first, a speaker, allows the gunner to hear the IR
6 acquisition signal and IFF tones when interrogations are made through the
7 IFF subsystem. The second indicator is a bone transducer that allows the
8 gunner to “feel” the IR acquisition signal on the cheekbone. Also attached to
9 the sight is a clear plastic eye shield that protects the gunner’s left eye when
10 the missile is fired.
- 11 • **Gripstock.** The gripstock consists of the gripstock assembly and the IFF
12 antenna assembly. The gripstock assembly contains all of the circuits and
13 components required to prepare and launch the missile as well as the interface
14 for the IFF subsystem. After the missile is launched, the gripstock is removed
15 from the launch tube for attachment to -another- missile round. When the
16 IFF antenna assembly is unfolded and the IFF interrogator is connected to
17 the weapon, the gunner can interrogate aircraft and receive coded replies.
- 18 • **BCU.** The battery coolant unit contains a thermal battery that provides power
19 for pre-flight system operations and a supply of argon gas to cool the IR
20 detector in the missile seeker. Once activated, the BCU supplies electrical
21 power and seeker coolant until the missile is launched or for a maximum of
22 45 seconds. The battery coolant unit is removed from the gripstock BCU well
23 and discarded immediately after use.

24 **3. Stinger missile parts.** Mr. Letendre will explain that the Stinger missile is
25 comprised of four sections: the tail, guidance, propulsion, and warhead.
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Mr. Letendre will testify about the design and purpose of each section:

- ***Tail.*** The tail assembly consists of four folding tail fins that provide roll and stability while the missile is in flight.
- ***Guidance.*** The guidance section consists of a seeker assembly, a guidance assembly, a control assembly, a missile battery, and four control surfaces (or wings) that provide in-flight maneuverability.
- ***Propulsion.*** The propulsion section consists of a launch motor and a dual-thrust flight motor. The launch motor ejects the missile from the launch tube. The missile coasts a safe distance (about 9 meters) from the gunner before the dual thrust flight motor ignites and provides a sustained 22 gravity acceleration that arms the missile. After the gunner arms the missile, a sustained flight phase maintains missile velocity until the propellant is consumed. Then the missile enters a free flight period in which the motor has burned out, but the missile maintains a degree of maneuverability prior to interception or self-destruction.

- 1 • **Warhead.** The warhead section consists of a fuse assembly and the
2 equivalent of one pound of high explosives encased in a pyrophoric titanium
3 cylinder. The fuse is extremely safe and makes the missile exempt from any
4 hazards of electromagnetic radiation to ordnance conditions. The warhead
5 can be detonated by penetrating the target, impacting the target, proximity to
6 the target, or self-destruction. Self-destruction occurs 15 to 19 seconds after
7 launch.

8 4. **Stingers in this case.** Mr. Letendre will testify that he reviewed photographs
9 and videos of the Stinger parts that were shown to defendants on February 22, 2024. Mr.
10 Letendre will testify that the photos and videos of the Stinger parts defendants saw on
11 February 22, 2024, are consistent with a Stinger missile system. More specifically, they
12 depict (A) an explosive or incendiary rocket or missile that is guided by any system
13 designed to enable the rocket or missile to (i) seek or proceed toward energy radiated or
14 reflected from an aircraft or toward an image locating an aircraft; or (ii) otherwise direct
15 or guide the rocket or missile to an aircraft; and/or (B) any device designed or intended to
16 launch or guide a rocket or missile described in (A).

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18 Mr. Letendre's qualifications are listed on the CV incorporated in this notice and
19 provided to defendants under separate cover. Mr. Letendre has not authored any
20 publications within the last 10 years or testified as an expert at trial in during the previous
21 four years.

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25 David R. Letendre
26 Stinger Production Lead
27 United States Army, AMRDEC
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1 Respectfully submitted this 16th day of May, 2025.

2 TIMOTHY COURCHINE
3 United States Attorney
4 District of Arizona

5 s/M. Bridget Minder
6 AMY C. CHANG
7 RAYMOND K. WOO
8 M. BRIDGET MINDER
9 Assistant U.S. Attorneys

10 LESLIE C. ESBROOK
11 CHRISTOPHER M. COOK
12 Trial Attorneys, National Security Division

13 **CERTIFICATE OF SERVICE**

14 I hereby certify that on May 16, 2025, I electronically transmitted the attached
15 document to the Clerk's Office using the CM/ECF System for filing a copy to the following
16 CM/ECF registrants:

17 Richard C. Bock and Dominic Rizzi, *Attorneys for Abraham Keech*
18 Kurt Altman, *Attorney for Peter Ajak*

19 s/Alexandria Gaulin
20 U.S. Attorney's Office
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